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The Honorable Raúl Grijalva U.S. House of Representatives Natural Resources Committee 1324 Longworth House Office Building Washington, DC 20515

Dear Chairman Grijalva,

I write to thank you for the introduction of H.R. 6654, the Climate Adaptation Science Centers Act (CASC Act), and wholeheartedly support the bill!

I have partnered with the U.S. Geological Survey (USGS) and their dedicated science team since 2012, when the South Central Climate Science Center (now South Central Climate Adaptation Science Center, CASC) was established at the University of Oklahoma (OU). Currently, OU leads a consortium with the Chickasaw Nation, Choctaw Nation of Oklahoma, Oklahoma State University, Texas Tech University, Louisiana State University, and the University of New Mexico to provide natural and cultural resource managers with the science, tools, and information they need to address the impacts of climate variability and change on their areas of responsibility.

We work to solve climate adaptation problems and build capacity in our students and staff to conduct actionable science (i.e., science that is useful, useable, and used). We lead interdisciplinary research with physical, life, and social scientists and work with partners to apply big data, simulations, and artificial intelligence to answer complex questions. We work to enhance the sustainability of water resources and the resilience of ecosystems. We investigate the future of fire and methods to manage it better on the landscape. We learn from the almost 70 Tribes and Pueblos in our four-state region (LA, NM, OK, and TX) about traditional adaptation practices and mentor Native students to blend cultural knowledge with Western science, as appropriate.

Most importantly, we team with managers at the U.S. Department of the Interior agencies, their partners, and Tribes and Pueblos, listening to their needs and priorities. Our science is not intended to sit on a shelf, but to be infused into relevant management decisions that reduce costs, reduce risk, and enhance local economies. We serve as a "boundary organization" that spans the research and management communities in a way that respects local values, independence, and objectivity while working together on relevant science.

The South Central CASC also is committed to a new generation of scholars who look like America, address grand challenges, respect the viewpoints of stakeholders and rightsholders, and bring enthusiasm and new perspectives. For example, over four years, we

Center Members

 $\text{U.S. Geological Survey} \cdot \text{University of Oklahoma} \cdot \text{The Chickasaw Nation} \cdot \text{The Choctaw Nation of Oklahoma} \\ \text{Texas Tech University} \cdot \text{Louisiana State University} \cdot \text{Oklahoma State University} \cdot \text{University of New Mexico} \\$







supported a three-week internship program for underrepresented students in science, technology, engineering, and mathematics (STEM) field. The program brought 14 African Americans, 23 Hispanics, six Native Americans, and eight white women across three states to experience the variety of STEM-related jobs that are related to climate change. Undergraduates saw people who looked like them conducting interesting and important research. That experience opened their eyes to graduate school — something they had never considered before. In fact, Mr. Aaron Flores, formerly an undergraduate student at Texas Tech University, never thought that research or graduate school was for him until he spent time with the South Central CASC. He will be defending his PhD this semester at the University of Utah and has already accepted a tenure-track assistant professor position for Fall 2022.

The main office of the South Central CASC has employed over 80 people in its 10 years (mostly undergraduate and graduate students). Fifty percent have been people of color and sixty percent have been female. We have demonstrated that an excellent scientific organization indeed can result from a diverse workforce because climate adaptation science is an area where everyone has a place to serve. Some of our employees have moved on to government jobs, including at the USGS; others work in the private sector, bringing their knowledge to build a more sustainable and growing economy.

Through the leadership of our tribal liaisons (funded by the USGS and BIA), the South Central CASC has conducted 53 trainings for tribal environmental professionals, with 1,044 tribal attendees from 249 tribes and 9,835 contact hours. Our tribal liaisons and science staff also partner with tribes to conduct tribal youth programs and tribal-led climate adaptation research. We provide technical support for vulnerability assessments, hazard mitigation plans, and climate adaptation plans. We educate university and government researchers how to ethically work with tribal partners.

In the past decade, the South Central CASC and its sister CASCs have made major investments in people, science, data, and tools, both through USGS support but also through substantial resources at our host and consortium institutions. But these success stories have not been without their obstacles. Delays in funding caused us to lose some of the best and brightest students. Questions about our continued existence has influenced relationships with local and regional partners. Difficulties in interagency cooperation caused me to eliminate an original consortium institution of our CASC. The inability for the USGS to hire needed positions has reduced our effectiveness. The CASC Act can remove or reduce these obstacles and let us focus on what we do best — serving natural and cultural resource managers with actionable science and educating the next generation of managers to address complex problems.

I strongly support the CASC Act and thank you for your consideration of our needs.

Sincerely,

Renee A. McPherson

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University Director, South Central Climate Adaptation Science Center Associate Professor, Geography and Environmental Sustainability University of Oklahoma